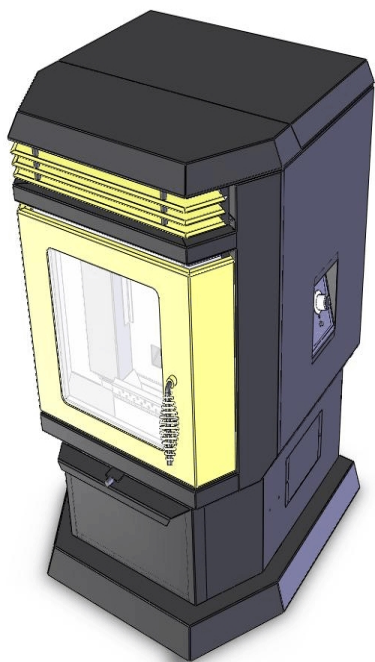




## EF3801B-AL Pellet Heater Installation & Operating Instructions

Please read this entire manual before installation. Save these instructions.



### SAFETY NOTICE

- ▶ **CAUTION: HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**
- ▶ **IF THIS HEATER IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT.**
- ▶ **FAILURE TO COMPLY WITH OWNERS' MANUAL INSTRUCTIONS WILL VOID YOUR WARRANTY!**

**PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION AND USE OF THIS PELLET FUEL-BURNING ROOM HEATER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN**

**INSTALLER: PLEASE LEAVE THIS MANUAL WITH THE OWNER!!**

**WARNING: THIS HEATER SHOULD NOT BE INSTALLED IN A SLEEPING ROOM.**

### GENERAL INFORMATION

Installation and repair should be done by a qualified service person. The heater should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to fuel quality, excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the heater be kept clean.

The EASYFIRE Pellet heater has been designed and approved for burning **wood pellet fuel only**. Burning other forms of fuel is not permitted and will void all warranties.

This unit has been approved for use with a **3" Type L Pellet Vent System**.

NEVER use gasoline, gasoline-type lantern fuels, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire. Keep all such liquids well away from the heater while it is in use.

Ashes must be disposed of in a metal container with a tight fitting lid and placed on a noncombustible floor or ground, well away from all fuels, pending final disposal.

**NOTE :** During the first few burns the high temperature paint and sealant used in manufacture will emit some odor and smoke. Open doors and windows to the outside for proper ventilation during the first burn cycle and curing of the paint.

This heater, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the **National Electrical Code, ANSI/NFPA 70-2006**.

Provide adequate clearances around air openings into the combustion chamber and adequate accessibility clearance for servicing and proper operation. Never obstruct the front opening of the heater.

The heater may be installed as a free-standing unit mounted on a non-combustible protective floor pad or hearth. Or it may be mounted into an existing U. L. approved wood stove chimney. Non-combustible floor protection is required and must be used when placing the heater on any combustible material.

The pellet heater must be operated with a power source and will not operate using natural draft. If there is a power failure the heater will shut down. If the 12 volt back system is installed, the heater will automatically switch to 12 volt power.

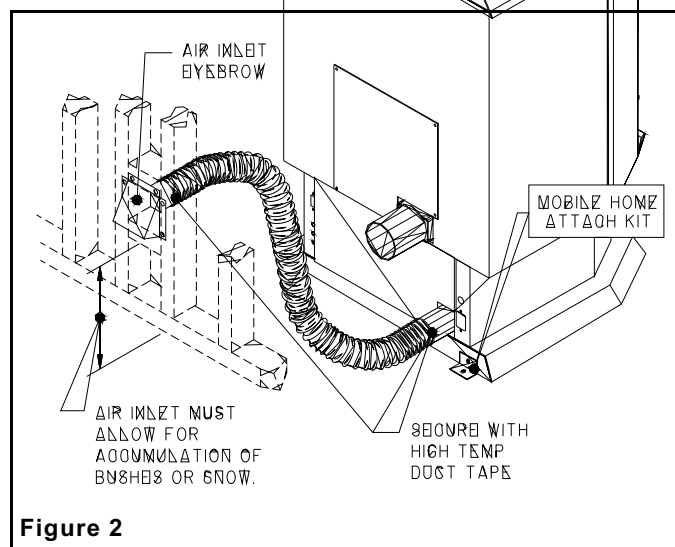
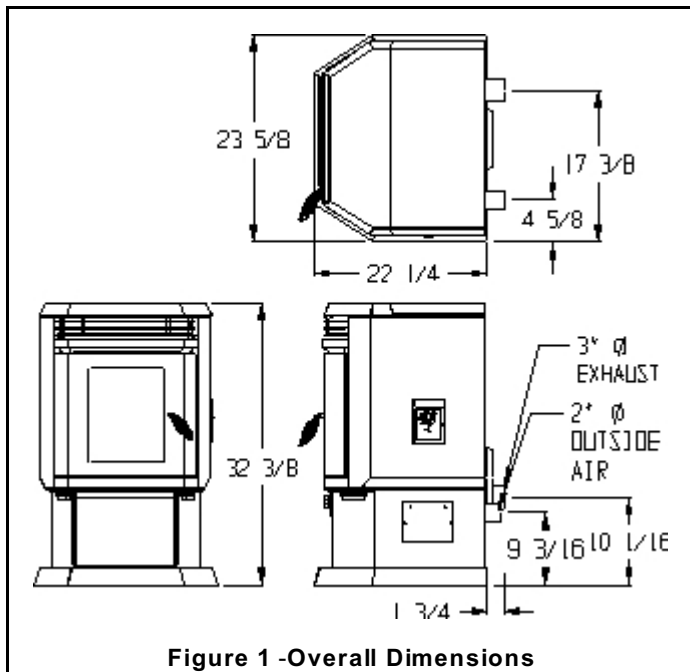
The EasyFire Pellet Heater has been listed by OMNI-Test Laboratories, Inc. to ASTM, U.L., and EPA Standards.



Sierra Products, Inc.  
5061 Brooks St., Ste. B  
Montclair, CA 91763



Listed by OMNI-Test Laboratories, Inc.  
Report No. 256-S-01-4



**WARNING:** Installation of a Mobile Home Attachment Kit P/N 10412 and outside combustion air is mandatory in mobile or modular home installations although it may also be used in all residential applications.

An outside air inlet **MUST** be provided for combustion and ventilation air. The air inlet must remain unrestricted while unit is in use. Outside air connection is located in the rear of the heater (Figure 2). Use conduit pipe or metal flex pipe and/or fittings to make the air intake hook-up.

**CAUTION: STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALLS AND CEILING/ROOF MUST BE MAINTAINED.**

1. When deciding on the location of your heater and vent pipe, try to minimize the alteration and reframing of structural components of the building. **Vent pipe must be installed so that access is provided for inspection and cleaning.**
2. Avoid installing heater in high traffic areas. Keep children well away from the heater when in operation.
3. **A 3" clearance to combustibles must be maintained** for horizontal and vertical venting. When passing through ceilings or walls, you must use a listed wall thimble, making sure all combustible materials and insulation products are a minimum of 3" away from the pellet vent pipe.
4. **A non-combustible hearth pad must be used if installed on a carpet, wood floor or other combustible material** (see Figure 3).
5. When installing the exhaust vent into an existing chimney, a tee must be installed behind the heater before going up into the chimney. This is necessary in order to remove fly ash accumulation.
6. **Exit termination (distance to openings):**
  - a. 3 ft. minimum above any forced air inlet located within 10 ft.
  - b. 4 ft. minimum below and horizontally or 1 ft. minimum above any door, window or gravity air inlet into any building.

**OUTSIDE COMBUSTION AIR IS MANDATORY IN MOBILE OR MODULAR HOME INSTALLATIONS.**

**CAUTION: DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.**

## **VENTING AND INSTALLATION CLEARANCES**

**CONTACT LOCAL BUILDING OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.**

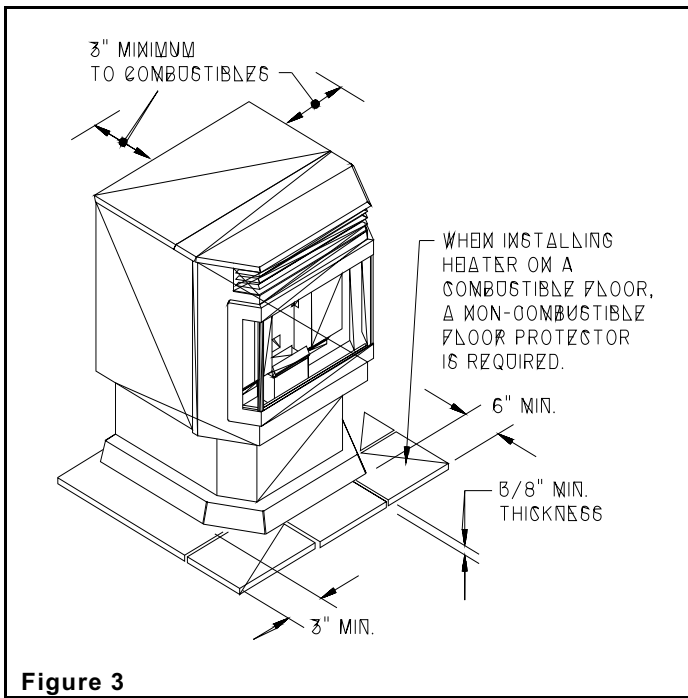
**A LISTED, 4" MINIMUM TYPE "L" PELLET VENT PIPE IS MANDATORY ON ALL INSTALLATIONS.**

**DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT, DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**

Use only listed 3" minimum Type "L" pellet vent and components for installation. The exhaust vent system must be attached to the unit and to each adjoining section. All joints for connector pipe shall be fastened with at least three screws. If vented horizontally, joints shall be made gas-tight by sealing with high temperature silicon or material specified by vent pipe manufacturer. Failure to use listed pellet vent pipe or install it per manufacturers instructions will void your warranty.

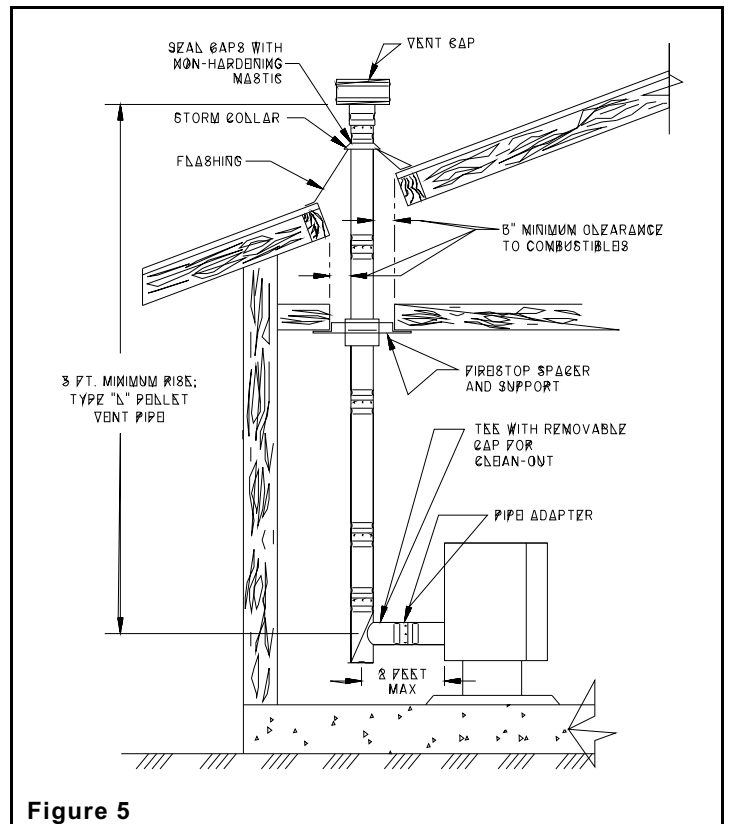
**INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER**

*Vent Pipes' inner and outer diameters may vary. Check with vent pipe manufacturer for further details.*

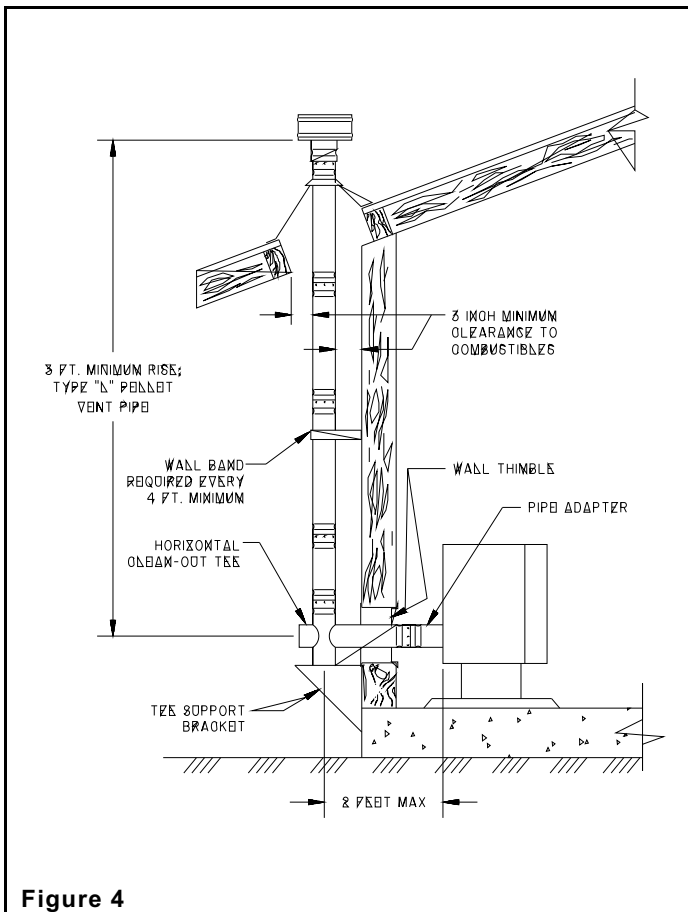


**Figure 3**

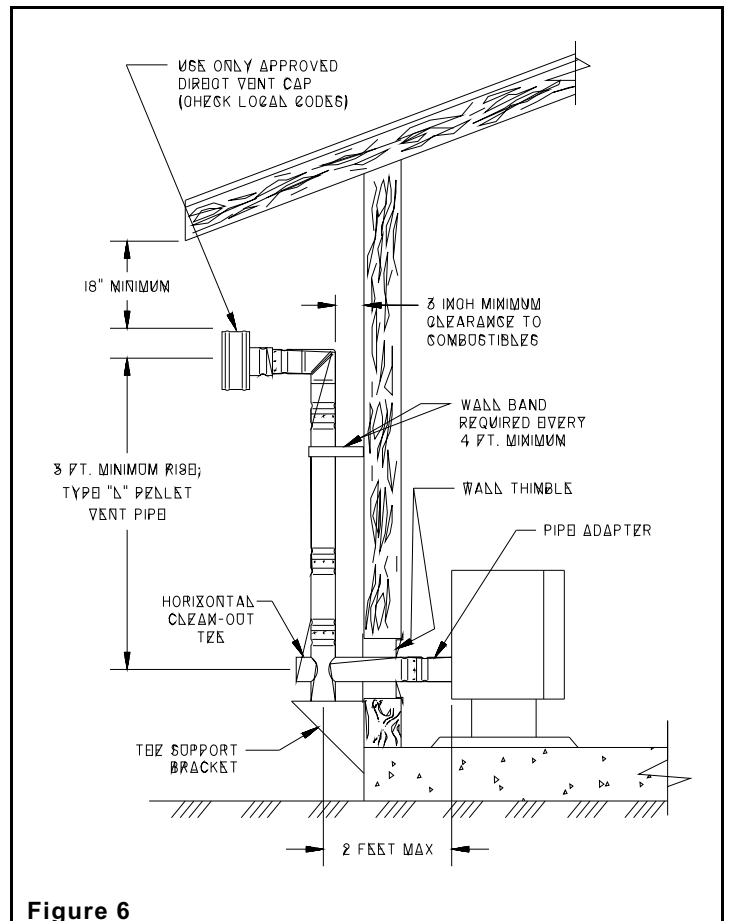
- c. 2 ft. minimum to an adjacent building and 7 ft. minimum above grade when located adjacent to public walkways.



**Figure 5**



**Figure 4**



**Figure 6**

## UNIT INSTALLATION

Route the power supply cord so that it does not touch any of the exterior components of the heater.

1. When exiting through the wall with your type L Pellet vent pipe, you may go straight out through a wall thimble. You must connect a pellet vent tee at this point and extend the vent pipe at least 3' (three feet) vertically outside to provide good draft and allow the gases to exit. The tee must have a clean out cap for inspection and regular cleaning (**Figure 4**). Horizontal runs must be limited to 2' (two feet). A wall band is required for every 4' (four feet) minimum on a vertical run at an exterior wall.
2. All pellet vent pipe connections including exit at the rear of the heater should be sealed with high temperature silicone (450°) or metallic duct tape. This prevents smoke and soot leakage into the living area. If this is not done, there is a possibility that the room fan will pick up any leakage and blow it into the room.

## AUTOLITE INSTALLATION INSTRUCTIONS

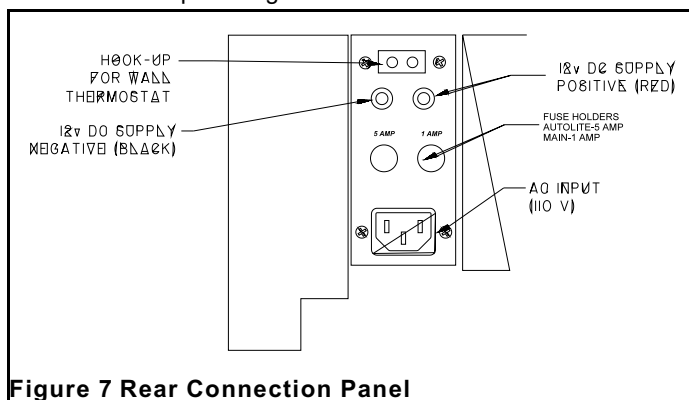
The AutoLite System is factory installed with the only installation requirements being the optional thermostat.

### Wall Thermostat Installation:

The wall thermostat is designed to automatically regulate the room temperature from the control panel heat setting to the "Off" setting based upon room temperature. Remember to leave the control panel on the "Medium or High" position when utilizing the wall thermostat feature.

The following is a step by step procedure for installing the optional wall thermostat. Note connection terminals on left side of unit at rear (**Figure 7,8**). Use 18/2 thermostat wire for the installation.

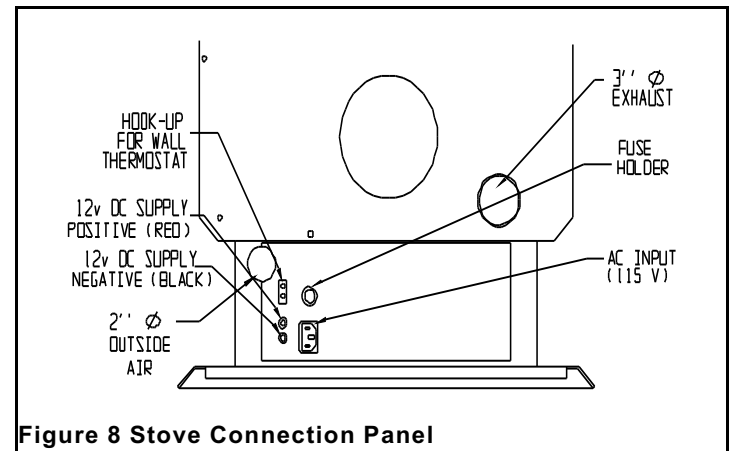
- a. Unplug heater from wall outlet and 12VDC power!
- b. Remove factory jump wire and hook up thermostat wires to terminals (**Figure 7,8**).
- c. Locate thermostat approximately 10 to 12 feet from heater or in area that requires steady temperature.
- d. Run thermostat wires from heater to thermostat along wall or under carpet etc. and hook wires to thermostat terminals. On new construction you can, of course, run wire in the walls before sheet rock or paneling is done.



**Figure 7 Rear Connection Panel**

- e. Reconnect AC power.
- f. Make sure all wiring is completed before plugging the EASYFIRE Heater back into the wall outlet.

**IMPORTANT** - Any electrical work performed on the EASYFIRE Heater should be done by qualified personnel.

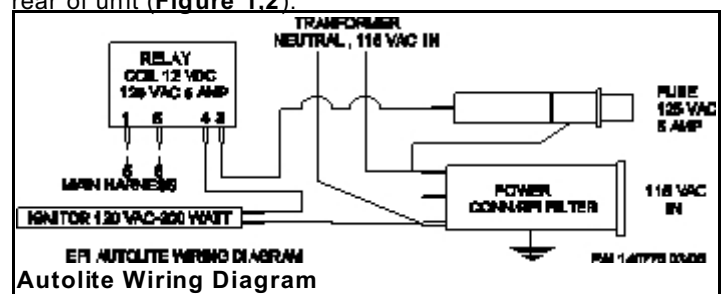


**Figure 8 Stove Connection Panel**

### Remote Control Thermostat Installation:

The remote thermostat is designed to automatically regulate the room temperature from the control panel heat setting to the "Off" setting based upon room temperature and placement of the remote thermostat. Remember to leave the control panel on the "Medium or High" position when utilizing the wall thermostat feature.

The following is a step by step procedure for installing the optional remote thermostat. Note connection terminals on rear of unit (**Figure 1.2**).



**Autolite Wiring Diagram**

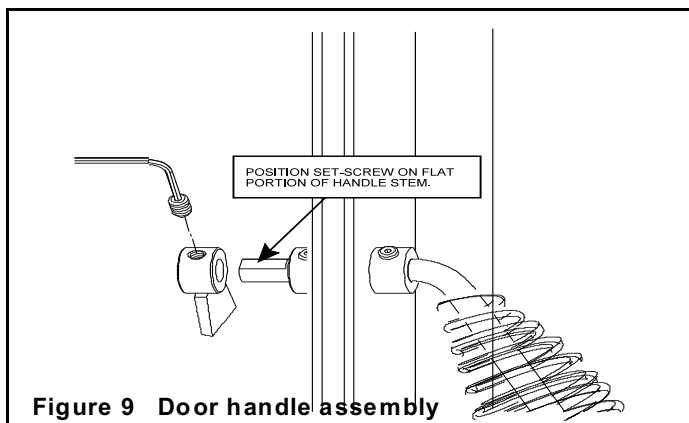
- a. Unplug heater from wall outlet and 12VDC power!
- b. Mount millivolt style remote receiver box to rear of stove using double-sided tape.
- b. Remove factory jump wire and hook up thermostat wires to terminals (**Figure 7,8**).
- d. Reconnect AC power and follow instructions with remote thermostat regarding set up.

**IMPORTANT** - Any electrical work performed on the EASYFIRE Heater should be done by qualified personnel.

## DOOR HANDLE ASSEMBLY

The door handle and latch must be assembled and adjusted prior to the operation of the stove.

1. Position handle assembly through door and secure with collar by sliding over shaft and tightening with allen wrench provided (**Figure 9**).
2. Position latch on end of shaft with flat facing allen screw. Depending on gasket, shaft will protrude approx. 1/4" through back of latch collar. Snug allen screw.

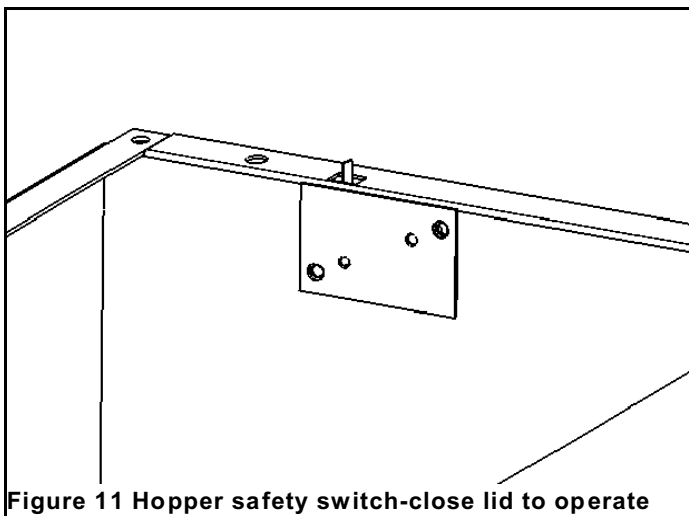


**Figure 9 Door handle assembly**

3. To adjust door, close and turn handle so latch contacts striker. Door gasket must contact firmly against front face of unit. This can be checked by closing against a piece of paper. Firmly tug on paper, if it moves with solid resistance the door is properly adjusted.

## FUEL SELECTION

Proper fuel selection is critical. Your stove requires 1/4" diameter wood pellets. The pellets must be specifically manufactured for use pellet heaters. Use of fuel non-conforming fuel will cause the stove to operate erratically. Additionally, a low ash content of below 1% is will reduce your cleaning and maintenance time. Store pellets in a clean dry area. Do not use pellets that have been damp or have a moisture level above 5%. The quality of pellet fuel varies from brand to brand. This will affect the efficiency of your heater. We suggest that you try several brands until you find one that gives you a clean efficient burn. Poor quality pellets will burn rich with black soot and ash will accumulate quickly. Quality pellets will burn clean and ash build up will be minimal.



**Figure 11 Hopper safety switch-close lid to operate**

## AUTOLITE OPERATION

Your EASYFIRE Pellet Stove is equipped with the Autolite Automatic ignition and operating system.

The AutoLite system is integrated into the stove to allow for automatic start up using a heating element located in the burn pot. This element starts the initial fire required to burn the wood pellets. The system operates on 120VAC power supplied through a separate fuse and runs for five minutes during the initial stove start up. After the five minute period the AutoLite system is deactivated and the

stove operates based on the EasyFire digital control system requirements. If the house AC power should quit, the AutoLite system will not be available however, with the optional battery attached the stove can be manually lit and operate on battery power for several days (depending on battery size).

## START-UP AND OPERATION

**Warning:** This stove incorporates a hopper lid safety switch. The feed system will remain in-operable when the door is open.

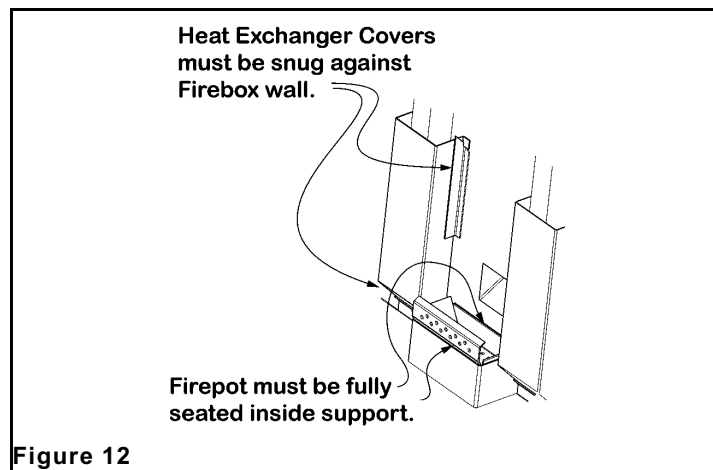
### Priming the feed system

When the stove has run out of fuel the feed systems requires several start and stop cycles to charge the auger. Pushing the Low button from Off will start the feed for 90 seconds. When the feed stops cycle to Off then back to Low for another 90 seconds. When pellets begin to fall in the burn pot switch to Off. You are now ready to start the stove.

#### 1. AutoLite Start-Up:

Prior to operating your AutoLite stove, make sure the hopper is full of wood pellets and the interior components have been installed properly including; burn screen & pot, heat exchange covers, and ash drawer.

**IMPORTANT:** The Fire Pot must be seated flush and must sit even in the pot tray. Air leaking around the Fire Pot will create a poor burn (**Figure 3**). Light the pellets in Fire Pot using any approved pellet lighter.



**Figure 12**

**Note:** Caution must be taken when installing burn pot or operating door not to damage ceramic glass. Do not attempt to operate heater if glass becomes damaged in any way!

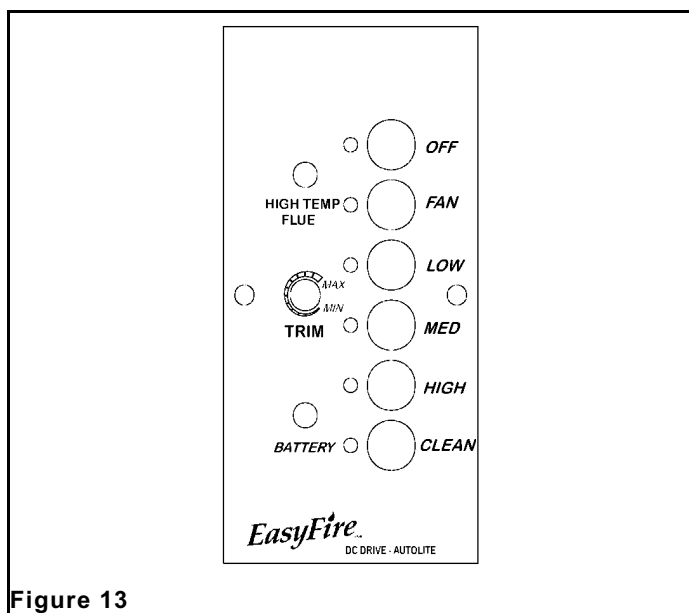
**2. AutoLite Control Functions:** Control functions on the Easyfire are as follows: OFF, FAN, LOW, MEDIUM, HIGH, CLEAN. Here is how each function works:

- A. When the Control Button is turned to **FAN**, a timer is activated and you will have about twenty (20) minutes to get the pellets lit and reach a minimum temperature. This function is used for match lighting when the AC power is out.

Should the pellets not light in 20 minutes simply turn the button to **OFF** and begin again. This will give you another cycle to get the pellets lit. The reason for the timer function is so that the heater will automatically shut down if the fire goes out. Pellets do not feed in the FAN position.

- B. In the **LOW** position, the EASYFIRE will be feeding approximately 1 to 1½ lbs. of pellets per hour and the flame will fluctuate between 1" and 6" in height.
- C. In the **MEDIUM** position the EASYFIRE will be feeding approximately three (3) pounds of pellets per hour and the flame will fluctuate between 3" and 8" of fire.
- D. In the **HIGH** position the EASYFIRE will be feeding approximately 4+ lbs. per hour and the flame will fluctuate between 3" and a full flame. The fan speed will increase accordingly as the heater automatically adjusts itself based on temperature inside the heater.
- E. The **CLEAN** position is to be used only when the heater is not burning and you wish to clean out the accumulated ash in the front of the fire area. See **CLEAN OUT** section of maintenance instructions.
- F. After the heater is running for several hours and you wish to turn it off simply press the button to **OFF**. The heater will continue running until it cools down and then will automatically shut itself down.
- G. **REMEMBER:** Each feed position will fluctuate because the microprocessor is automatically adjusting the feed and air based on temperature. This means the pellet feed rate and flame height will change accordingly based on quality of pellet and heat loss of dwelling.

**3. Starting the Stove:** Push a Heat Range button (Low or Medium is best for start up) (**Figure 13**) and turn the thermostat up to "Call for heat". The stove fan will begin to operate along with the ignitor cycle. After about a minute the pellets will begin to fall in the burn pot. After five minutes there will be a fire in the burn pot and the stove will begin to heat up. When the stove reaches start up operating temperature it will then switch to the control panel setting and begin it's automatic operation cycle.



**Figure 13**

**Prior to stove operating on thermostat, confirm proper operation by servicing and adjusting the stove as outlined in the "Installation Guide". When servicing stove, operate with thermostat bypassed as stove will reset to start up mode each time thermostat is activated.**

## Feed Trim Adjustment

Underneath the control button you will find a small round button that will turn forward and reverse. This button can adjust the feed motor in the LOW operating position. By turning the button clockwise you can increase the feed on LOW and by turning it counterclockwise you can decrease the feed in the LOW position. Factory setting is 9:00 o'clock.

**Once the stove is at operating temperature for one hour set the stove on LOW. Adjust the trim button so that average flame is approx. 1-2" above the burn pot. This will set the average feed rate (air/flue) for best operation.**

**Move this button carefully!** It is designed to fine tune your LOW setting in the event you change brands of pellets and/or live at a higher elevation. If this setting is to low the stove may go out during LOW setting operations. If this should happen increase the trim by small amount.

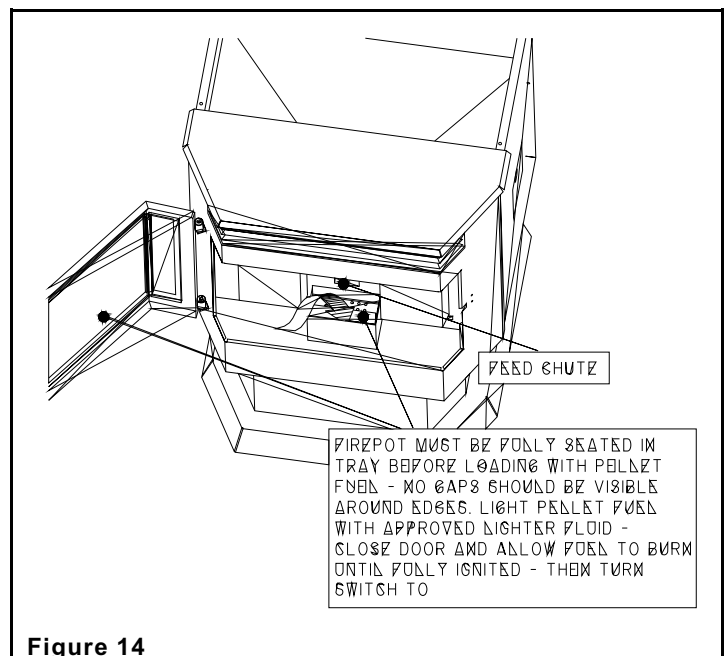
## MATCH LIGHT FIRE AND START-UP

### 1. Filling the Hopper and Start-Up:

**CAUTION: FUEL HOPPER LID MUST BE CLOSED BEFORE OPERATING UNIT. MAINTAIN HOPPER SEAL IN GOOD CONDITION. DO NOT OVERFILL HOPPER! THE EASYFIRE WILL HOLD ABOUT 60 LBS. OF PELLETS.**

Open the top lid and fill the hopper with pellets (**Figure 11**).

Make sure hopper lid is fully closed. Open the front door and fill the burn pot with a hand full of pellets.



**Figure 14**

**IMPORTANT:** The fire pot must be seated flush and must sit even in the pot tray. Air leaking around the fire pot will create a poor burn (**Figure 14**). Light the pellets in Fire Pot using any approved pellet fuel starter.

Allow pellets to burn for approximately 1 minute, or until pellet ignition has been achieved. **Close door** and turn the control knob to the **"FAN"** position. Allow fire to burn for several minutes. When the pellets are well lit, turn the control knob to **"LOW"** for approximately 10 minutes then turn up to **"HI"**. We recommend that you run the heater on "Medium" or "HI" for about 30 minutes in order to get the

heat exchanger hot before turning it to "LOW". You will need to burn the heater for a few hours before deciding which setting is best for your particular needs.

**NOTE: CAUTION MUST BE TAKEN WHEN INSTALLING BURN POT OR OPERATING DOOR NOT TO DAMAGE CERAMIC GLASS. DO NOT ATTEMPT TO OPERATE HEATER IF GLASS BECOMES DAMAGED IN ANY WAY!**

**CAUTION: BOTH THE MAIN DOOR AND THE ASH DRAWER MUST BE PROPERLY ADJUSTED AND FULLY CLOSED TO FORM AN AIR-TIGHT SEAL FOR PROPER STOVE OPERATION. FAILURE TO SECURE DOOR AND DRAWER MAY CAUSE OVER FEEDING AND HIGH TEMPERATURE SHUT DOWNS.**

**DO NOT USE GRATES OR OTHER METHODS OF SUPPORTING FUEL IN BURN POT OR INTERIOR OF STOVE.**

**2. Control Functions:** Control functions on the Easyfire are as follows: OFF, FAN, LOW, MEDIUM, HIGH, CLEAN. Here is how each function works:

- A.** When the Control Knob is turned to **FAN**, a timer is activated and you will have about ten (10) minutes to get the pellets lit and reach a minimum temperature. Should the pellets not light in the 10 minutes simply turn the knob to **OFF** and begin again. This will give you another 10 minutes to get the pellets lit. The reason for the timer function is so that the heater will automatically shut down if the fire goes out. Pellets do not feed in the FAN position.
- B.** In the **LOW** position, the EASYFIRE will be feeding approximately 1 to 1½ lbs. of pellets per hour and the flame will fluctuate between 1" and 6" in height.
- C.** In the **MEDIUM** position the EASYFIRE will be feeding approximately three (3) pounds of pellets per hour and the flame will fluctuate between 3" and 8" of fire.
- D.** In the **HIGH** position the EASYFIRE will be feeding approximately 4.5 lbs. per hour and the flame will fluctuate between 3" and a full flame. The fan speed will increase accordingly as the heater automatically adjusts itself based on temperature inside the heater (see G below).
- E.** The **CLEAN** position is to be used only when the heater is not burning and you wish to clean out the accumulated ash in the front of the fire area. See **CLEAN OUT** section of maintenance instructions.
- F.** After the heater is running for several hours and you wish to turn it off simply turn the knob to **OFF**. **The heater will continue running until it cools down and then will automatically shut itself down.**
- G. REMEMBER:** Each feed position will fluctuate because the microprocessor is automatically adjusting the feed and air based on temperature. This means the pellet feed rate and flame height will change accordingly based on quality of pellet and heat loss of dwelling.

## **DISPOSAL OF ASHES**

To dump ash from firebox, move lever to left several times allowing spring to return against stop (**Figure 10 & 11**). Once ash box is full, box should be placed in a non-combustible floor or on the ground, well away from all combustible materials pending final disposal. If the ashes

are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.

## **OPTIONAL 12V HOOK-UP & OPERATION**

- 1. The EASYFIRE 12V back up can be purchased as an option and includes the following components:
  - a. Deep cycle sealed 12V battery.
  - b. Battery connector cables for hook-up to the heater.
- 2. In order to hook-up the battery and engage the 12V backup system simply connect red cable to red terminal on the heater (**see Figure 6**) and to positive connector on battery [the terminal marked (+)] and connect the black cable to the black terminal on the heater and to the negative connector on the battery (the terminal marked (-)). If you hook up the cables backwards the red LED light above the terminal receptacles will come on. If hooked up properly this LED will glow green.

**WARNING - MAKE SURE RED CABLE GOES TO RED TERMINAL (POSITIVE CONNECTOR) AND BLACK CABLE GOES TO BLACK TERMINAL (NEGATIVE CONNECTOR).**

- 3. If you decide to purchase your own 12V back up system we recommend a sealed gel cell battery. Failure to install the proper battery could cause physical harm to you and your property and will also void the heater warranty.
- 4. When the battery is properly connected and the heater plugged in, the following will happen automatically:
  - a. The heater will automatically switch to 12V power if there is a power failure, and switch back when power is restored.
  - b. The battery will be trickle charged as long as the heater is plugged into 110 AC wall outlet. Do not use extension cords. The trickle charge will not recharge a low or dead battery but it will keep a charged battery at maximum performance.
- 5. If you choose to separate the battery from the heater by lengthening the cables you must make sure that the cable wire used will carry the current to the heater. For example, if the distance is 10 to 20 feet then 12 gauge wire must be used. Check with your local electrical professional to make sure you have used the proper gauge wire/cable.

## **CANADIAN REQUIREMENTS**

If this unit is being installed in Canada, the following additional requirements must be meant:

- 1. A chimney connector shall no pass through and attic or roof space, closet or similar concealed space, or a floor, or ceiling.
- 2. Where a chimney passage through a wall, or partition of combustible construction is desired, the installation shall conform the CAN/CSA-B365.
- 3. Maintain an effective vapour barrier at the location where the chimney or other component penetrates to the exterior of the structure by sealing with high temperature silicone.

4. Clearance to combustibles may only be reduced by means approved by the regulatory authority.
5. Store pellet fuels in a dry area away from unit. Do not store fuels within the space heater installation clearances or within the space required for charging and ash removal.
6. Adequate ventilation air is required to operate this heater. During operation the heater draws air for combustion which can be assisted by the installation of outside combustion air inlets. However, certain weather conditions such as icing or use of kitchen exhaust fans may impact and reduce the effectiveness of vents. It is important to note that room air starvation will negatively impact the operation of the heater.

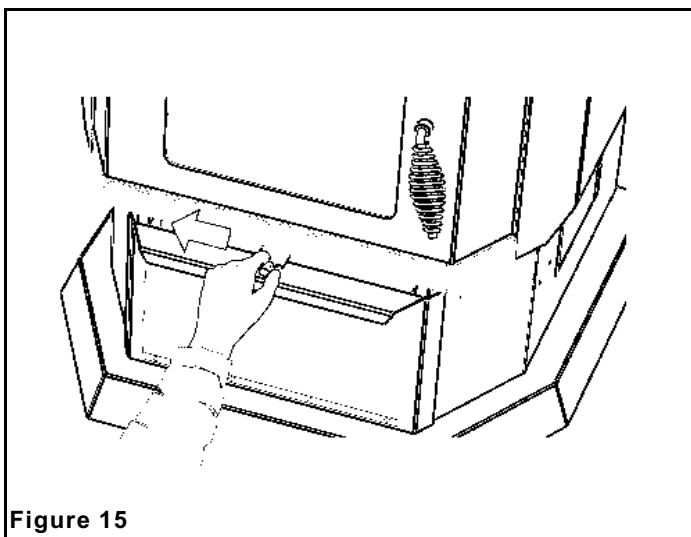


Figure 15

7. If power outages with battery backup or room air starvation occurs during operation of heater, smoke in the house may result. This may trigger smoke detectors if they are installed.

## MAINTENANCE PROCEDURE

**CAUTION: MOVING PARTS MAY CAUSE INJURY, DO NOT OPERATE WITH REAR COVER REMOVED.**

**WARNING: RISK OF ELECTRICAL SHOCK, DISCONNECT ALL POWER BEFORE SERVICING.**

**ALWAYS TURN YOUR Heater OFF & LET IT COOL BEFORE CLEANING.**

### Soot and Fly-ash: Formation and Need for Removal.

The products of combustion will contain small particles of fly-ash. The fly-ash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, such as occurs during startup, shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary. Your EASYFIRE Pellet Heater requires routine maintenance for maximum performance and is mandatory for the warranty to remain in effect. The following procedures should be studied carefully and performed regularly as indicated:

1. **Fly Ash:** Some ash will accumulate in the heat exchanger, firepot and flue and should be cleaned out on a regular basis for best efficiency and safety. When the heater is shut down and cold, you should:

- a. Open door and remove clean out slide cover. To remove, simply slide up and out from retaining angle bracket (**Figure 10**). Clean one side at a time. With one slide cover removed, leave door open and turn control knob to the "**CLEAN**" position. Let heater run until ash in fire pot area is vacuumed out by heater fan. Turn off and replace cover. Remove remaining cover and repeat procedure for the other side. The tee cap on the vent pipe should be cleaned out after this procedure.
- b. Remove firepot by lifting up and out, it may be brushed out or vacuumed. Firepot should be cleaned daily. Make sure holes in pot are not clogged. The area around and below the pot should be checked every five or six days depending on how many hours a day you are burning your heater and the quality of the pellets being burned. (After a few days you will be able to determine the frequency needed for clean out.)

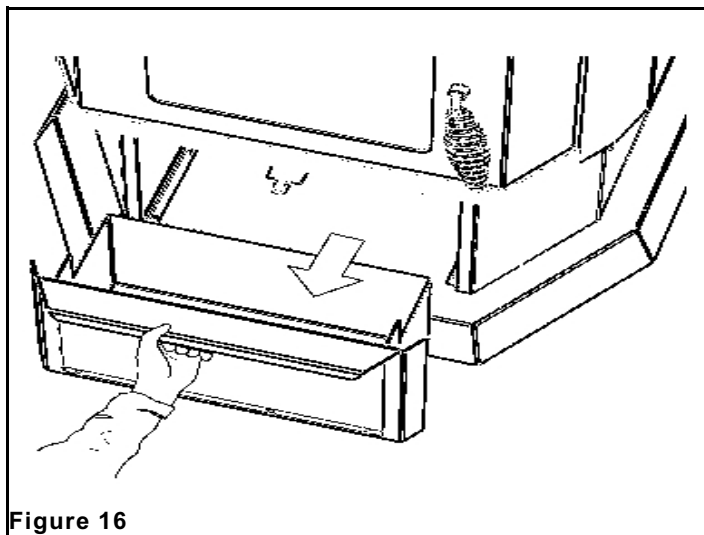


Figure 16

- c. Scrape pellet feed chute with putty knife to remove hardened material on which sawdust can accumulate.
- d. The tee connector on the vent pipe must have a clean out cap and this must be checked every four to six weeks or whenever you utilize the clean out mode on the control dial.

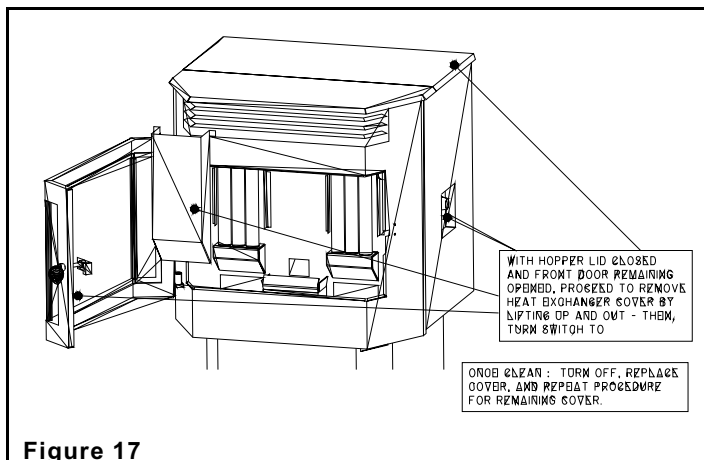
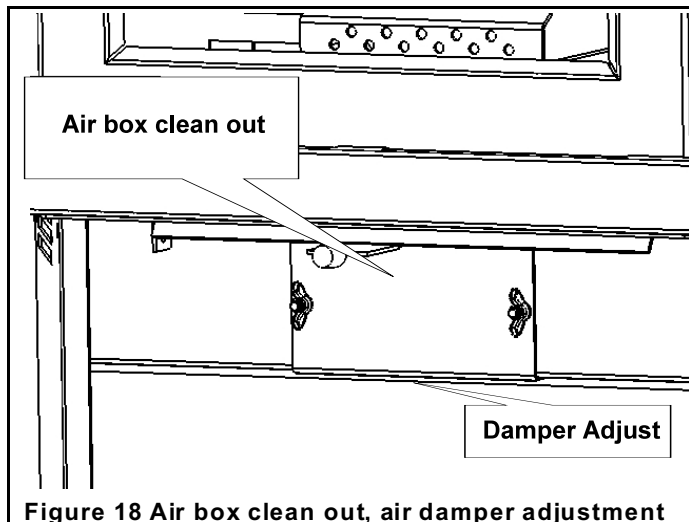


Figure 17

- e. Fly-ash can also accumulate in the vent pipe. Inspect exhaust system frequently to maintain free flow of exhaust fumes and fly-ash. The frequency of clean-out depends entirely on the quality of the pellets, so you will have to initially monitor the buildup in the pellet vent pipe. Those installations going into an



existing flue must be installed with a tee connector (**Figure 3,4,& 5**) to allow access to clean the ash from the pellet vent pipe.



**Figure 18 Air box clean out, air damper adjustment**

- f. Fly-ash will accumulate below the burn pot. Remove the air box clean out and depose of ash. Use care not move air damper setting.
2. **Hopper Clean Out:** Vacuum the accumulated sawdust in the hopper weekly. Keep free of debris and foreign material. **AN ACCUMULATION OF SAWDUST CAN CAUSE IRREGULAR PELLET FEED.** For best results this should be done on a regular basis depending upon how often the heater is used. If you burn the heater all the time you should do this every eight to ten days.
3. **Cleaning the Exhaust Fan Blade & Heat Exchanger:** The exhaust blower should be checked for excessive fly ash buildup. Regular and routine maintenance utilizing the **CLEAN OUT** feature will keep the exhaust blower housing and fan blades clean. This cleaning can only be done when the heater is NOT burning. For best results run the fan in the **CLEAN OUT** position **with the door open** for approximately one minute or until ash is no longer being picked up by the fan. Remember, you must always check the clean out cap on the tee after utilizing the **CLEAN OUT** feature.
4. **Keeping the Glass Clean:** If soot deposits accumulate on the glass, clean with window glass cleaner and a paper towel when the glass is cold.
5. **Polishing the Gold and Chrome:** All chrome and gold plating used on the EASYFIRE heater can be cleaned with a soft cloth and non-abrasive cleaner.
6. **Cleaning & Polishing Gold Plated Parts:** Gold is a soft metal and therefore a fragile surface. Prior to the first burn it is important to use Windex or comparable product and a soft clean cloth to wipe any marks off all gold surfaces or the heat will cause the marks to remain in the surface permanently. Always clean the gold surface when the heater is **COOL**.
7. **Door glass replacement:** Should the door glass become broken it may be replaced by scraping the sealer from around the outer edge of the glass. Carefully pry glass from door frame then clean all sealer from frame. Obtain a replacement glass from your local dealer and attach glass to door using High Temperature Silcon Sealer (min. 400 deg.F). Apply sealer to all four corners of the glass and set glass into

frame. Apply sealer to mating edge of glass and frame. Allow two hours dry time before installing door onto heater. **Note: Replace with Pyro-Ceramic Glass only. Refer to parts list for specifications.**

## TROUBLE-SHOOTING

The following scenarios are provided in order to help you locate a difficulty if the heater performs in a manner which would seem to indicate a malfunction:

1. **Problem:** I loaded the heater for start-up, lit the fire starter and pellets but the fire didn't keep going.  
  
**Solution:** Check power cord to see that it is plugged in. Remember that the timer on start up runs about 10 minutes and if the heater has not heated up enough to deactivate the timer you will have to start over by turning the knob to off and then back to **FAN** or **LOW**.  

The EASYFIRE will automatically switch to 12 volt backup provided you have the 12 volt option installed.
2. **Problem:** The heater was lit and burning properly, then suddenly it stopped feeding pellets.  
  
**Solution:** a) Check pellet supply in hopper. If empty, fill and follow start-up procedure as outlined in the beginning of this manual. b) Occasionally, a foreign object, debris or an excessive amount of sawdust can enter the feed mechanism and jam the feed chute. If this happens, you must empty the hopper and check the feed chute to see what is causing the jam. Remove any foreign material or object and re-start the heater.  
**CAUTION:** Keep fingers and hands clear of feed mechanism when heater is on.
3. **Problem:** The fire was burning well and then it began to overfeed pellets and started backing up into the pellet feed chute, smothering the fire.  
  
**Solution:** When the pellets are overfeeding, it usually means that the air flow has been reduced. Check the firepot air intake holes to be sure they are clear. Check to see if firepot was properly seated in pot tray. Check to see if the manifold may have filled with fly ash. If you use a low grade pellet, and clinkers (fused ash and dirt) form in the bottom of the firepot, it will choke the air intake (you might consider changing the brand of pellets to one that burns cleaner). You must let the fire go out before removing and cleaning the firepot.  
**Never vacuum out the heater when the heater is in operation! The hot ashes can lodge in your vacuum cleaner and cause a fire!**  
You must clean the manifold and air box regularly in order to insure a good air to fuel ratio, thus allowing the heater to "breathe" properly. You must also check the vent pipe and tee to see that they are not clogged and full of ash.
4. **Problem:** Heater was burning well and then soot began forming on the glass door.  
  
**Solution:** Black soot forming on the glass door means that the combustion is not right and the heater needs a good clean out. Some brands of pellets burn much richer than others and you might have to change brands of pellets and/or have the air/fuel settings re-adjusted by your dealer. It is normal to have the glass cloud up after several hours of burning but it should wipe off with a good window cleaner. If the glass turns black quickly, then the heater needs a good clean out.

5. **Problem:** We had a power failure and the heater emitted smoke for about five minutes.

**Solution:** If the heater emits smoke during a power failure, and you have frequent power failures then we suggest you purchase the battery back-up system. If the vent pipe is installed according to these instructions the smoke will syphon out of the pipe in most instances.

6. **Problem:** After several weeks of outstanding performance, the heater suddenly stopped and the red light under the control knob came on. This light is the Hi Temp/Flue Indicator Light.

**Solution:** The Hi-Temp/Flue Indicator light indicates that fly ash has built up in the exhaust system and/or there is a restriction in the exhaust/flue system. Check the pipe system for excessive ash and clogging, particularly the vent cap. Remove the clean out cap on the tee and make sure that ash has not blocked the exhaust air flow. This automatic shut down in case of flue clogging is a safety feature and if the shut down occurs it means you have a problem and should consult a service technician and/or clean your pipe and heater thoroughly. If you feel the fly ash build up is excessive, we suggest that you try another brand. In moist climates the pellets and fly ash can actually absorb moisture from the air and create creosote and a severe clogging problem. Keep this in mind when you store and handle your pellets. The heater warranty does not cover the quality of the fuels used or the way they may be handled either before or after you've purchased them.

7. **Problem:** I press a "Run" button and the heater did not start.

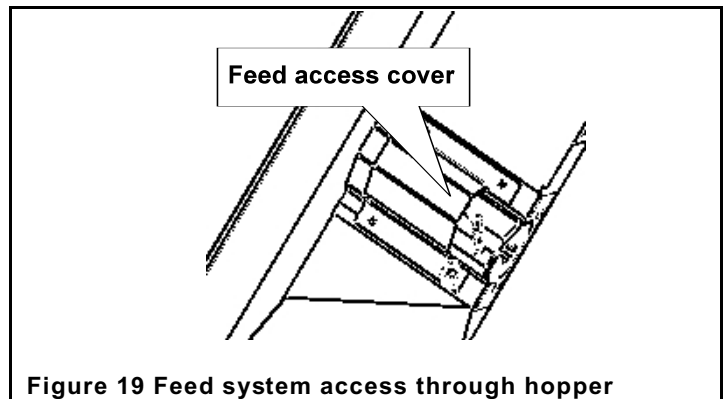
**Solution:** Check for AC power. The autolite system requires 110V AC power to operate. If heater only 12VDC battery power, follow manual light procedure. If AC power is available, clean burn pot for heavy ash deposit. Heavy ash deposits will act as insulator and not allow pellets to light. Check autolite fuse located on fuse panel to confirm fuse is not blown. Replace fuse with 5 amp if required.

8. **Problem:** I started to add pellet fuel and the heater went out.

**Solution:** The heater incorporates a safety switch that will disable the feed system when the hopper door is open. If fuel is to be added while heater is in operation it must be accomplished with in several minutes of opening the door.

9. **Problem:** I turned off the switch and the heater kept running.

**Solution:** This is normal. The exhaust blower will keep running until it cools down and then it will automatically turn off. This can vary by the temperature the exhaust has reached and the temperature of the cooling air.



**Figure 19 Feed system access through hopper**

10. **Problem:** Feed system jammed.

**Solution:** This condition is caused by fuel contaminated with hard materials such as rocks or metal objects. To correct this remove all pellets from hopper. Unplug heater from any power source (12V & 110V). Remove the (4) nuts with a 3/8" nut driver attaching access cover. Carefully remove cover and vacuum out remain pellets. Locate the object jamming auger and reassemble. Plug heater into power source and push "Run" button. With hopper door open, press safety switch down and view auger operation. If auger turns freely add fuel. And prime fuel system.

## **HI TEMP/FLUE AND TRIM INDICATORS:**

When the Hi-Temp/Flue indicator light comes on (red lite beneath control knob) it means that the flue is obstructed or you have a reverse draft and gases cannot exit properly. Maintenance is required and a thorough cleaning and pipe check must be performed. (Check to make sure that the left and right clean out covers were installed properly, this can cause a Hi-Temp indication)

**TRIM button :** Underneath the control knob you will find a small round button that will turn forward and reverse. This button can control the feed motor rate. By turning the button clockwise you can increase the burn rate and by turning it counterclockwise you can decrease the burn rate. Use this to change the overall rate for different pellets. For instance, if the pellet has high ash and burns dirty decrease the "trim" and if the heater goes out on low or has low flame increase the "trim".

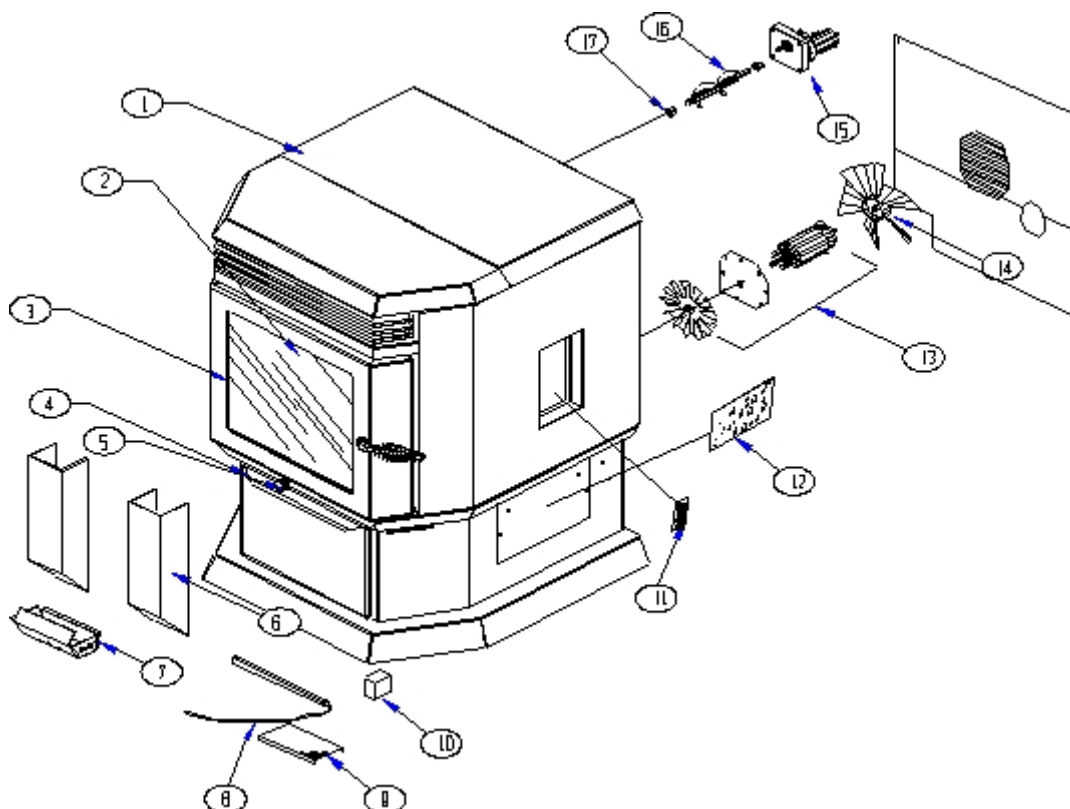
**Move this button carefully!** It is designed to fine tune your LOW setting in the event you change brands of pellets and/or live at a higher elevation.

## **Customer Service & Replacement Parts**

Replacement parts are available from your local dealer or on-line @ [www.sierraproductsinc.net](http://www.sierraproductsinc.net) . Our call or write:

Customer Service  
Sierra Products, Inc.  
5061 Brooks St., Ste. B, Montclair, CA 91763  
Phone 1-909-399-3355 x21  
Fax 1-909-399-3357  
[www.sierraproductsinc.net](http://www.sierraproductsinc.net)





ITEM No.	PART NUMBER	DESCRIPTION
1	110541	HOPPER LID SAFETY SWITCH
2	110429	DOOR GLASS (CERAMIC 11"x11 3/4"x5mm)
3	100125	DOOR GASKET, WOVEN FIBER
4	110451	ASH DUMP KNOB
5	300522	ASH DRAWER
6	200549	HEAT EXCHANGE COVER
7	300500	FIREPOT - AL V2
8	120117	AUTOLITE IGNITER
9	202164	BURN POT SCREEN - AL
10	120120	AUTOLITE POWER RELAY
11	120118	AUTOLITE PUSH BUTTON SWITCH
12	120114	MAIN CONTROL BOARD V2.2 -A L
13	10475	COMBUSTION/CONVECTION FAN ASSY.
14	110070	CONVECTION FAN BLADE
15	300536	V3 FEED MOTOR ASSEMBLY
16	300544	V3 AUGER/SHAFT ASSEMBLY
17	110524	FEED SHAFT BUSHINGS (2)
18	100126	HOPPER LID GASKET (NOT SHOWN)